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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,397	04/03/2001	Leon F. Chang		1619

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EXAMINER	
NGUYEN, HANH N	

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/825,397	CHANG, LEON F.	
	Examiner	Art Unit	
	Hanh Nguyen	2662	

. -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendments filed on 5/11/05*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *21-25* is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 9 and 19 are objected to because of the following informalities: the first cell processing strategy and the second cell processing strategy are not clearly explained in order to help one skilled in the art to understand. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 USC 103(a) as being unpatentable over Vuong (Pat. 6,765,912 B1) in view of Chang (Pat. 6,728,249 B2).

In claims 1 and 11, Vuong discloses a method for performing high capacity conversion of Asynchronous Transfer Mode (ATM) formatted cells received from an ATM packet network (ATM network 12, fig.1, col.3, lines 18-20) to a Time Division Multiplexed (TDM) format (Fig.4, describes a gateway 14/16 comprising a module 202 which converts ATM cells into circuit switch format, wherein the circuit switch format is TDM, see col.7, lines 60-67 & col.4, lines 14-17) for delivery to a circuit switched network (see fig.4, circuit switch networks 32, 34, col.3, lines 64-67). The ATM cells including one or more of ATM Adaptation Layer (AAL) 1/2 bearer cells, AAL 3/4 data cells, AAL5 signaling cells and raw AAL0 cells (see fig.4, ATM

packets are received at AAL 212 which supports various types of traffic including voice, video traffic, data traffic, call signalling, see col.7, lines 55-67 & col.5, lines 10-20). Vuong et al. further discloses ATM packets from ATM network 12 are received at physical layer 216 (fig.4) (receiving a stream of ATM cells from said ATM packet network); segmented into payloads for insertion into cells according to various traffic types (processing ATM cells according to payload type) (see col.7, lines 50-60), gets translated by module 202 into TDM type (translating cell headers of said ATM cells according to a predetermined translation scheme) and forwarded by ISUP control 218 to circuit network interface 224 (forwarding the translated ATM cells, see col.7, line 60 to col.8, line 5).

Vuong does not disclose ATM cell header containing fields that determines how the ATM cells will be processed.

Chang discloses, in Fig.2 & fig.4, a process of receiving a packet from ATM network 12 at a network processor 26. (network processor 26, fig.2), The network processor receives ATM packet, processes the packet, extracts packet header to determine whether a CPU bit has been set. If so, the packet is forwarded to processor 60 for further routing (See col.8, line 60 to col.9, line 30. Therefore, it would have been obvious to one ordinary skilled in the art to implement the method of cell header processing of Chang into Vuong 's method in order to process received ATM cell and convert into TDM format for delivery to a circuit switching network according to header 's field and transmit the ATM cell to destination according to payload types. The implementation supports various types of packet transmissions comprising voice, data, signaling, and specifically high speed transmissions.

In claims 2 and 12, Vuong discloses receiving said ATM cells at an optical fiber interface (see fig.4, physical layer 216 includes E/O interface on both transmit and receive sides, col.7, lines 40-44).

In claims 3, 4, 5, 13 ,14 and 15, Vuong does not disclose a CAM used to lookup for translated header. Chang discloses mapping (lookup in the CAM) untranslated cell header (packet header) to translated cell header (virtual channel connection). See col.7, line 65 to col.8, line 15. Therefore, it would have been obvious to one ordinary skilled in the art to use the CAM lookup table in Vuong 's system to map untraanslated header to translated header.

In claims 6 and 16, Vuong does not disclose address value to locate corresponding translated cell headers in a lookup table. Chang discloses in the CAM 58, fig.4, an index (address value) used to retrieve address (address value corresponding translated cell header in the look up table). See col.8, lines 10-17. Therefore, it would have been obvious to one ordinary skilled in the art to use the index value in the CAM 58 in Vuong 's system in order to locate corresponding translated cell headers in the lookup table.

In claims 7 and 17, Vuong does not disclose applying the translated cell headers to ATM and forwarding the cells for cell processing. Chang discloses packet header is prepared using VCC (translated cell header) and forwarding the cells for cell processing. See col.8, lines 40-48. Therefore, it would have been obvious to one ordinary skilled in the art to apply the teaching of Chang into Vuong in order to forward the translated cell header to appppropriate destination.

In claims 8 and 18, as explained in claim 1 wwhich supports various type of traffic, the limitations of these claims have been addressed.

In claims 9 and 19, Vuong discloses cell processing includes processing operations and Maintenance (OAM) cells according to a first cell processing strategy and processing bearer and data traffic cells (processing bearer traffic including voice, video or other forms of streams or real-time traffic by bearer control 210, fig.4, col.5, lines 10-17) according to a second processing strategy.

In claims 10 and 20, Vuong disclose processing signalling cells according to third cell processing strategy (processing call signaling by BICC 208). See col.7, lines 63-67.

Allowable Subject Matter

Claims 21-25 are allowed.

The following is an examiner's statement of reasons for allowance:

In claim 21, the prior art does not disclose a board processor adapted to process second 0AM ATM cells having second translated cell header values; a multiplexer/demultiplexer adapted to process AAL 1/2 and AAL 3/4 ATM cells and to route said oells to output ports according to third translated cell header values; plural Segmentation And Reassembly (SAR) processors, each SAR processor being adapted to receive AAL 1/2 and AAL 3/4 ATM cells received from one of said multiplexer/demultiplexer output ports, to reassemble said cells into a format suitable for Time Division Multiplexing (TDM) transmission, and to route said reassembled cells to output ports according to fourth translated cell header values.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's amendment with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pasternak (Pat. 6,407,992 B1) discloses Multiplexing terminals in a Distributed network.

Caves (Pat. 6,266,343 B1) discloses Telecommunication system.

Scoggins et al. (Pat. 6,832,254 B1) discloses Method and apparatus for associating in an end-to end call identifier with a connection in a multimedia packet network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HANH NGUYEN
PRIMARY EXAMINER